

and the spool at the longitudinal end(s) of the central core assembly. This feature of the embodiment of Figures 1-4 is present in each of independent claims 1, 45 and 52, although recited somewhat differently in each of these claims. The recitation of thermal expansion coefficients in claim 45 and 52 is a further characteristic of the embodiment of Figures 1-4. Because the newly submitted claims read on the elected embodiment, it is improper for the Examiner to refuse to consider those claims. During the interview, the Examiner noted that the additional limitation to thermal expansion coefficients would require a further search on the part of the Examiner. This may be true, but an additional search is not grounds to refuse consideration of new claims after a non-final action on the merits.

Because claims 45-53 are directed to the originally presented and elected invention, claims 45-53 should have been considered in the last Official Action and consideration of those claims on the merits now is solicited.

Claims 1-3 were rejected under 35 USC 112, second paragraph, as being indefinite. As discussed during the interview, claim 1 has been revised above to refer to an "edge" at each longitudinal end of the core assembly. The limitation to a longitudinal end edge is offered solely in response to the Examiner's rejection under 35 USC 112, second paragraph, and, therefore, entry of this amendment after final rejection is solicited.

It is noted that a similar revision has been made to claim 45 in anticipation of examination of that claim and to avoid a potential rejection under 35 USC 112. This amendment is not offered in response to the Examiner's prior art rejection.

Applicant notes with appreciation the Examiner's indication that claim 3 contains allowable subject matter. The allowable subject matter of claim 3 has been incorporated into an amended claim 1 so that claims 1 and 2 should now be allowed.

Claims 45-53 are also submitted to be patentable over Fukaya et al. In this regard, claim 45 specifically requires 1) that the elastic buffer member be disposed

between the central core assembly and the spool disposed around the core assembly, (2) that the elastic buffer member cover at least one of the longitudinal end edges of the central core and, thereby (3) restrict direct contact between the longitudinal end edge of the core assembly and the spool. Even if element 31a of Fukaya is considered to cover "an edge" of the central core assembly, no part of component 31 is disposed between the central core assembly and the spool, nor does it teach or suggest restricting direct contact between the end edge of the central core assembly and the spool. In fact, element 31 is not even an elastic component. It is therefore submitted that claim 45 is not anticipated by nor obvious from Fukaya. Further, claim 52 requires that the elastic member (1) be disposed in contact with the longitudinal end surface of the central core assembly, (2) be in contact with the radial outer surface of the central core assembly and, thereby, (3) restrict the central core assembly in the spool from directly contacting each other. Component 31 of Fukaya is not an elastic member and does not restrict the central core assembly and the spool from directly contacting each other. Indeed, as shown in Figure 5, component 31 is applied after the spool and coil are disposed in surrounding relation to the "core", and thus cannot restrict contact between the spool and the core assembly.

At least for the reasons advanced above it is respectfully submitted that claims 45-53 are not anticipated by nor obvious from Fukaya and, therefore, these claims should be allowed along with claims 1 and 2.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

A handwritten signature in black ink, appearing to read "Michelle N. Lester", written over a horizontal line.

Michelle N. Lester
Reg. No. 32,331

MNL:slj
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100



VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please replace the paragraph beginning at page 12, line 1, with the following rewritten paragraph:

-- The cylindrical member 17 is integrally formed into a cylindrical tube shape, as shown in Fig. 2. The cylindrical member 17 is comprised of a cylindrical part 17a, annular or ring parts 17b and 17c formed at the two longitudinal ends (top and bottom) of the cylindrical part 17a and having through holes 18 formed at their centers, and angled parts 17d formed at corners between the cylindrical part 17a and the annular parts 17b and 17c. As shown in Figs. 3 and 4, the cylindrical part 17a covers the outer circumference of the central core assembly 13, the annular parts 17b and 17c cover the portions of the two longitudinal end faces of the central core assembly 13, and the angled parts 17d cover the end corners of the permanent magnets 14 and 15 or the two end corners (end edges) of the central core assembly 13. The annular parts 17b and 17c are made thicker than the cylindrical part 17a to function as a second buffer member. The through holes 18 are made diametrically smaller than the permanent magnets 14 and 15 so that the core 12 and the permanent magnets 14 and 15 are fitted into the cylindrical member 17 by expanding diametrically the through holes 18.- -

IN THE CLAIMS

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

1. (Amended) An ignition coil for an engine comprising:

a central core assembly including a rod-shaped core, said central core assembly having two longitudinal ends and [corners] an edge at each said longitudinal [ends] end;

a primary spool and a secondary spool arranged around an outer circumference of the central core assembly;

a primary coil wound on the primary spool and a secondary coil wound on the secondary spool, one of the coils being disposed radially inside the other of the coils; and a first buffer member part covering said edges of said two longitudinal [end corners] ends of the central core assembly, wherein the first buffer member part is formed into a tube shape and has a hole therein on at least one of the two longitudinal ends of the central core assembly; and the hole is smaller in diameter than the central core assembly.

Kindly cancel claim 3 without prejudice or disclaimer.

45. (Amended) An ignition coil for an engine comprising:

a central core assembly including a rod-shaped core, said central core assembly having two longitudinal ends and [corners] an edge at each said longitudinal [ends] end;

an insulating spool arranged around the core assembly, the spool being made of a resin material having a coefficient of thermal expansion different from a coefficient of thermal expansion of the core assembly;

a coil wound on the insulating spool; and

an [elstic] elastic buffer member disposed between the central core assembly and the spool and covering at least one of said edges of said longitudinal [end corners] ends of the central core assembly to thereby restrict a direct contact between said at least one longitudinal end corner of the central core assembly and the spool.